

DETAILED ACTION

1. Applicant's response filed September 15, 2008 in response to the Office Action of May 13, 2008 is acknowledged.
2. Claims 1 to 41 are cancelled and have been renumbered as claims 42 to 86.
3. Claims 45 and 81 have been cancelled by a preliminary amendment on September 15, 2008.
4. Claims 42-44, 47, 55, 57, 65-68, 74-77, 80 and 92 have been amended.
5. New claims 83 to 86 have been added.

Allowable Subject Matter

6. Claims 42, 76, 77, 80, and 82 are allowed.
7. The following is an examiner's statement of reasons for allowance:

Regarding claims 42, 76, 77, 80, and 82, prior art fails to disclose or make obvious a field asymmetric ion mobility spectrometer or ion filter or method of analyzing a sample or method of manufacturing a field asymmetric ion mobility spectrometer that discloses a field asymmetric ion mobility spectrometer comprising an ionizer, ion filter, a deflector electrode, ion detector and a controller where the ion filter is located between the deflector electrode and ion detector and the controller is configured to apply an oscillating electric potential having a first phase a second phase within the ion channel.

Art Unit: 2881

The ions are moved back and forth between the conducting electrodes and are gradually separated according to their mobility. Since the ion filter is tunable, The spectrum of detected ions can provide information on multiple analytes simultaneously making the system highly customizable.

Prior art by Döring (US 6,107,624) discloses an ion mobility spectrometer (IMS) but fails to disclose a filter and the ion are separated according to their arrival times at the detector located at the end of the drift tube (time-of-flight). In the instant application, a field asymmetric ion mobility spectrometer is disclosed which includes a controller that uses an oscillating electric potential to differentially direct ions within a channel that is defined by a filter.

Prior art by Miller (referenced in IDS of 10/11/2007) also fails to disclose an ion channel defined by a filter and is defined by a plurality of conductive electrodes separated along the length of the channel by at least one non-conductive layer.

8. Claims 43-44, 46 to 75, 78, 79 and 83 to 86 are allowed by the virtue of their dependence on claims 42, 76, 77, 80 and 82.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MEENAKSHI S. SAHU whose telephone number is (571)270-3101. The examiner can normally be reached on Monday - Friday 8AM - 5PM est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2881

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David A Vanore/
Primary Examiner, Art Unit 2881

/Meenakshi S Sahu/
Examiner, Art Unit 2881